

Case Report

Open Access

Case Report: Uterine Prolapse in a Young Nulliparous Female

Neeta Meena

Obstetrics and Gynaecology Department, Ambedkar Nagar Hospital (Under Delhi government) Dakshinpuri, New Delhi

ABSTRACT

Childbirth is the dominant etiological factor for the development of pelvic organ prolapse (POP). Uterine prolapse is a rare condition in young nulliparous females. We report a case of a 20-year-old nulliparous married woman presenting with symptoms of pelvic pressure and discomfort. Physical examination and imaging studies confirmed the diagnosis of uterine prolapse. Patient underwent an open Shirodkar's sling surgery which was uneventful. And was fitted with a support pessary for additional support. Followed by pelvic floor physical therapy, including Kegel exercises and biofeedback. She reported significant improvement in her symptoms, with reduced pelvic pressure and discomfort.

*Corresponding author

Neeta Meena, Obstetrics and Gynaecology Department, Ambedkar Nagar Hospital (Under Delhi government) Dakshinpuri, New Delhi, India.

Received: January 20, 2025; **Accepted:** January 29, 2025; **Published:** February 05, 2025

Keywords: POP (Pelvic Organ Prolapse)

Introduction

Childbirth is the dominant etiological factor for the development of pelvic organ prolapse (POP) [1].

Pelvic organ prolapse (POP) is a major health care problem with prevalence varying from 8 to 41 % and has a substantial impact on quality of life. Women with POP symptoms not only experience physical complaints, but also encounter more problems regarding general health, personal relationships and sexual function [2].

Uterine prolapse is a condition where the uterus descends into or protrudes out of the vagina. It is more common in postmenopausal women who have undergone vaginal childbirth. However, it can also occur in younger women, particularly those with underlying medical conditions or genetic predisposition.

Impaired nerve transmission to pelvic floor muscles predisposes them to decreased tone, causing its sagging and stretching. Hence, multiparous women are at a higher risk for uterine prolapse. Genital atrophy and hypoestrogenism also contribute in the pathogenesis of prolapse. However, the exact mechanisms are not completely understood. Pelvic tumors, sacral nerve disorders, and diabetic neuropathy are also some other causes of uterine prolapse [3].

Case Report

A 20-year-old married nulliparous woman came to us with the chief complaints of something coming out of the vagina since 1 month associated with difficulty and dribbling of urine with Pelvic pressure and discomfort. She reported feeling a bulge in her vagina, particularly after standing or lifting heavy objects. She denied any history of vaginal childbirth, pelvic surgery, or chronic medical conditions. Physical examination revealed a

stage III uterine prolapse, with the cervix visible outside introitus (Figure 1&2). The patient's pelvic floor muscles were weak, with a negative cough stress test.



Figure: 1&2

Patient had no history of any other medical or surgical history in the past. Her routine investigations of hemoglobin, platelets and WBC counts, blood sugar and a urine routine examination were within normal limits. Her liver and kidney function tests were also within normal limits. A sonography was done showing a normal uterine contour with an increased cervical length of 3.8cm. Her menses were regular with a cycle of 30 days. Per vaginal examination showed uterine prolapse, which was reducible with no mass felt in the adnexa. Imaging studies, including a pelvic ultrasound and MRI, confirmed the diagnosis of uterine. Patient underwent an open Shirodkar's sling surgery which was uneventful.



Figure: 3

Exposing Uterosacral Ligament for Fixation of the Tape

The patient underwent pelvic floor physical therapy, including Kegel exercises and biofeedback. She was also fitted with a ring pessary to provide additional support to the uterus. Patient came for follow up after 6 week, followed by 6 month. She reported significant improvement in her symptoms, with reduced pelvic pressure and discomfort.

Discussion

Our case falling in the category of a young nulliparous married third-degree uterocervical prolapse with uterocervical length less than 12 cm without cystocele/rectocele, cervical hypertrophy/infection/laceration is suitable for undergoing one of the surgical procedures such as Purandare's cervicopexy, Shirodkar's sling, Khanna's sling, Sonawala's sling, Joshi's sling and Virkud's composite sling for nulliparous POP; each new procedure bringing some modification to the steps and rectifying the disadvantages [4].

Recent data suggest that aging, pelvic trauma, and pelvic surgeries cause denervation of the tissues and devascularization, anatomical changes, and increased degradation of collagen; all of these may lead to a decrease in the mechanical strength and predispose a woman to prolapse. It has been postulated that there is a significant reduction in the protein content and estrogens in the uterosacral ligaments, vagina, and parametrium of women with prolapse. This is a possible explanation for why many surgical procedures to correct prolapsed have failed, and after surgical correction, the recurrence rates are frequently high [5].

Conclusion

Pelvic organ prolapse is a rare occurrence in nulliparous juvenile adolescent and presents a challenge for the management of fertility preservation and further childbearing possibility. A multidisciplinary approach, including pelvic floor physical therapy and pessary use, can be effective in managing symptoms and improving quality of life.

References

1. Leijonhufvud Å, Lundholm C, Cnattingius S, Granath F, Andolf E, et al. (2011) Risks of stress urinary incontinence and pelvic organ prolapse surgery in relation to mode of childbirth. *Am J Obstet Gynecol* 204: e1-e6.
2. Digesu GA, Chaliha C, Salvatore S, Hutchings A, Khullar V (2005) The relationship of vaginal prolapse severity to symptoms and quality of life. *BJOG* 112: 971-976.
3. Norton P, Baker J, Sharp H (1990) Genito-urinary prolapse: Relationship with joint mobility. *Neuro Urodyn* 9: 321-322.
4. Virkud A (2016) Conservative Operations in Genital Prolapse. *The Journal of Obstetrics and Gynecology of India* 66: 144-148.
5. Jackson SR, Eckford SD, Abrams P, Avery NC, Tarlton JF, et al. (1996) Changes in metabolism of collagen in genitourinary prolapse. *Lancet* 34: 1658-1661.

Copyright: ©2025 Neeta Meena. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.